

MQ-1 PREDATOR

Though the aircraft will not be armed for the Vigilant Guard exercise, the MQ-1 Predator can carry the Multi-spectral Targeting System with inherent AGM-114 Hellfire missile targeting capability and integrates electro-optical, infrared, laser designator and laser illuminator into a single sensor package. The aircraft can employ two laser-guided Hellfire anti-tank missiles with the MTS ball.

The system is composed of four major components which can be deployed for worldwide operations. The Predator aircraft can be disassembled and loaded into a "coffin." The ground control system is transportable in a C-130 (or larger) transport aircraft. The Predator can operate on a 5,000 by 75 feet (1,524 meters by 23 meters), hard surface runway with clear line-of-sight. The ground data terminal antenna provides line-of-sight communications for takeoff and landing. The PPSL provides over-the-horizon communications for the aircraft.

An alternate method of employment, Remote Split Operations, employs a smaller version of the GCS called the Launch and Recovery GCS. The LRGCS conducts takeoff and landing operations at the forward deployed location while the domestic-based GCS conducts the mission via extended communication links.

The aircraft includes an ARC-210 radio, an APX-100 IFF/SIF with Mode 4, an upgraded turbo-charged engine and glycol-weeping "wet wings" for ice mitigation. The latest upgrade, which enhances maintenance and performance, includes notched tails, split engine cowling, steel braided hoses and improved engine blocks.

Background

The "M" is the Department of Defense designation for multi-role and "Q" means unmanned aircraft system. The "1" refers to the aircraft being the first of a series of purpose-built remotely piloted aircraft systems.

The Predator system was designed in response to a Department of Defense requirement to provide persistent intelligence, surveillance and reconnaissance information to the warfighter.

In April 1996, the secretary of defense selected the U.S. Air Force as the operating service for the RQ-1 Predator system. A change in designation from "RQ-1" to "MQ-1" occurred in 2002 with the addition of the armed reconnaissance role.

